

A1 wherein each of the heaters disposed on the heat treatment table are disposed concentric,  
and sensors are disposed in a thickness direction.

A2 3. (Amended) A heat treatment apparatus, which comprises:  
 a heat treatment table thereon a substrate to be treated is disposed;  
 two or more of heaters heating each regions obtained by dividing the heat treatment table  
 into two or more regions;  
 at least one sensor detecting temperature of the predetermined portion of the heat  
 treatment table;  
 a means for surmising amount of heat supplied to each portions of the substrate to be  
 treated based on the detected temperature; and  
 a means for controlling output of the each heaters based on the surmised amount of heat  
 so that the amount of heat supplied to the substrate to be treated is uniform[.];  
wherein each of the heaters disposed on the heat treatment table are disposed concentric,  
and sensors are disposed in a thickness direction.

A3 26. (Amended) [A] The heat treatment apparatus[, which comprises] set forth in claim 1,  
further comprising:

a first heating means for heating a lower surface of a substrate to be treated to a  
 predetermined temperature; and  
 a second heating means for heating an upper surface of the substrate to be treated at a  
 temperature higher than the first heating means.

10 31. (Amended) The heat treatment apparatus as set forth in claim 29<sup>14</sup>:  
 wherein the at least one heater of the second heating means is divided into a plurality of  
 heaters capable of turning on and off an electric power source independently.

17 32. (Amended) The heat treatment apparatus as set forth in claim 29<sup>14</sup>:  
 wherein the at least one heater of the second heating means is disposed concentric.

<sup>18</sup>  
~~33~~ (Amended) The heat treatment apparatus as set forth in claim <sup>17</sup>~~32~~:

wherein the at least one heater of the second heating means is divided into two or more parts along a diameter direction.

<sup>19</sup>  
~~34~~ (Amended) The heat treatment apparatus as set forth in claim <sup>14</sup>~~29~~:

wherein the at least one heater of the second heating means is a gradation heater of which heating capacity is continuously inclined from the center of the cover assembly to the periphery portion.

Please add new claims 37-51 as follows:

<sup>23</sup>  
~~37~~ The heat treatment apparatus as set forth in claim <sup>8</sup>~~9~~:

wherein the means for surmising the temperature is an arithmetic unit which is connected to the sensor and, based on the detected temperature, surmises mathematically the temperatures of the each portions of the heat treatment table;

wherein the controlling means is a control unit which is connected to the arithmetic unit and, based on the surmised temperatures of the each portions, controls the output of the each heaters so that the temperature of the entire heat treatment table is uniform. --

<sup>23</sup>  
~~38~~ The heat treatment apparatus as set forth in claim <sup>8</sup>~~9~~:

wherein each of the heaters disposed to the heat treatment table are disposed concentric, and sensors are disposed in one line in a diameter direction of the heat treatment table. --

<sup>24</sup>  
~~39~~ The heat treatment apparatus as set forth in claim <sup>10</sup>~~12~~:

wherein the means for surmising the temperature is an arithmetic unit which is connected to the sensor and, based on the detected temperature, surmises mathematically the amount of heat supplied to the each portions of the substrate to be treated;

wherein the controlling means is a control unit which is connected to the arithmetic unit and, and based on the surmised temperatures of the each portions, controls the output of the each heaters so that the amount of heat supplied to the substrate to be treated is uniform. --

<sup>25</sup>  
--~~40~~ The heat treatment apparatus as set forth in claim <sup>10</sup>~~12~~:

wherein each of the heaters disposed to the heat treatment table are disposed concentric, and sensors are disposed in one line in a diameter direction.--

<sup>24</sup>  
- ~~41~~ The heat treatment apparatus set for the in claim 3, further comprising:

a first heating means for heating a lower surface of a substrate to be treated to a predetermined temperature; and

a second heating means for heating an upper surface of the substrate to be treated at a temperature higher than the first heating means. --

<sup>27</sup>  
--~~42~~. The heat treatment apparatus as set forth in claim <sup>24</sup>~~41~~, which further comprises:

a means for controlling the second heating means to a temperature where the substrate to be treated is exposed to heat treatment at an aimed temperature. --

<sup>26</sup>  
--~~43~~. The heat treatment apparatus as set forth in claim <sup>27</sup>~~42~~, which further comprises:

a means for detecting the temperature of the substrate to be treated;

wherein the controlling means is a means for controlling the second heating means, based on the detected temperature of the substrate to be treated, so that a temperature of heat treatment of the substrate to be treated is an aimed temperature. --

<sup>29</sup>  
--~~44~~. The heat treatment apparatus as set forth in claim <sup>27</sup>~~42~~:

wherein the first heating means is a heating plate thereon a substrate to be treated is disposed, and which comprises further a cover assembly which is disposed opposite to the heating plate above the heating plate and evacuates a gas heated by the heating plate;

the second heating means is at least one heater disposed on a surface of the cover assembly opposed to the heating plate; and

the controlling means comprises a first control unit for maintaining the heating plate at a predetermined temperature, and a second control unit for adjusting the heater to a temperature which is higher than the heating plate and under which the substrate to be treated is treated at an aimed temperature. --

<sup>40</sup>  
--~~45~~. The heat treatment apparatus as set forth in claim <sup>27</sup>~~42~~:

wherein the first heating means is a heating plate thereon a substrate to be treated is disposed, and which comprises further a cover assembly which is disposed opposite to the heating plate above the heating plate and evacuates a gas heated by the heating plate, and a sensor for detecting the temperature of the substrate to be treated;

the second heating means is at least one heater disposed on a surface of the cover assembly opposed to the heating plate; and

the controlling means comprises a first control unit for maintaining the heating plate at a predetermined temperature, and a second control unit for adjusting the heater, based on the detected temperature of the substrate to be treated, to a temperature which is higher than the heating plate and under which the substrate to be treated is treated at an aimed temperature. --

<sup>31</sup>  
--~~46~~. The heat treatment apparatus as set forth in claim <sup>29</sup>~~44~~:

wherein the at least one heater of the second heating means is divided into a plurality of heaters capable of turning on and off an electric power source independently.--

<sup>32</sup>  
--~~47~~. The heat treatment apparatus as set forth in claim <sup>29</sup>~~44~~:

wherein the at least one heater of the second heating means is disposed concentric. --

<sup>33</sup>  
--~~48~~. The heat treatment apparatus as set forth in claim <sup>32</sup>~~47~~:

wherein the at least one heater of the second heating means is divided into two or more parts along a diameter direction. --

<sup>34</sup>  
--~~49~~. The heat treatment apparatus as set forth in claim <sup>29</sup>~~44~~:

wherein the at least one heater of the second heating means is a gradation heater of which heating capacity is continuously inclined from the center of the cover assembly to the periphery portion. --

<sup>35</sup>  
--~~50~~. The heat treatment apparatus as set forth in claim <sup>29</sup>~~44~~:

wherein the heating plate is a thermal surface plate which maintains a predetermined temperature by heating medium vapor circulating inside thereof. --